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JOINT COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK ON ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENT ON ENERGY EFFICIENCY BASELINE POLICY AND RELATED ISSUES

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JOINT COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK ON ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENT ON ENERGY EFFICIENCY BASELINE POLICY AND RELATED ISSUES

I. INTRODUCTION

The Office of Ratepayer Advocates (ORA) and The Utility Reform Network (TURN) respectfully submit these joint comments pursuant to the *Assigned Law Judge's Ruling Seeking Comment on Energy Efficiency Baseline Policy and Related Issues* (Ruling) issued on April 21, 2016, and *E-Mail Ruling Attaching Corrected Version of Staff Whitepaper on Energy Efficiency Baseline and Extending Comment/Reply Deadlines*, issued on April 28, 2016. The Ruling seeks party comment on any and all aspects of the *Staff White Paper on Energy Efficiency Baseline for Implementation of Assembly Bill 802* (White Paper) issued as an attachment to the Ruling. The Ruling also poses 20 questions to which parties are invited to respond.

In the discussion below, ORA/TURN respond to several of the questions in the Ruling, making the following recommendations:

- The Commission should return to net energy efficiency goals in order to channel ratepayer-funded efficiency efforts to activities and programs that achieve savings beyond those already planned and likely to occur;
- The Commission should adopt net goals but also specify that net goals are annual and cumulative, consistent with D.04-09-060;
- The Commission should remove the codes and standards (C&S) savings element of Program Administrator (PA) efficiency savings goals to eliminate potential double counting issues as PA portfolios transition more fully to programs that do not have a code or standard baseline;
- The category "Programs with Existing Conditions Baseline" in the White Paper should be changed to "Programs with Control or Comparison Case(s) as the Baseline" in order to more accurately represent Staff intent;

- The Commission should amend the HOPPs framework to require the use of control or comparison groups whenever feasible; and
- The Commission's full guidance on baselines for specific deemed and calculated measures should supersede the guidance on deemed and calculated approaches in the High Opportunity Programs and Projects (HOPPs) framework.

II. ANSWERS TO QUESTIONS IN THE ASSIGNED COMMISSIONER'S RULING

1. Do you agree with the exceptions recommended by staff to the use of existing conditions baseline? Why or why not? Be specific.

As Decision (D.) 14-10-046 explained, "[f]iguring out what you saved requires figuring out what *you would have consumed without the efficiency measure,*" i.e. the baseline that is compared to post-intervention consumption to determine savings.[1] Baselines are impossible to directly observe and measure; they are by definition something that did not actually happen, a counterfactual that must be constructed through informed reasoning and indirect measurement to produce a reasonable proxy for what would have happened but never did. This is difficult work, subject to both considerable uncertainty and sensitive to the assumptions and the measurement techniques used.

ORA/TURN commend Staff for a very thoughtful and thorough examination of energy efficiency (EE) baselines in the White Paper. The White Paper is attentive to the nuances of "what would have happened" in a variety of situations and includes careful consideration of the advantages and drawbacks of different measurement techniques that aim to quantify the baseline. ORA/TURN agree with the Staff's proposed framework classifying programs in three baseline buckets: (1) programs with an existing conditions

[1] D.14-10-046 at 52. Emphasis in the original.

baseline, (2) programs with the baseline based on individual measures, and (3) programs with a code/standard baseline. The resulting baseline typology Staff develops in the White Paper is largely aligned with national best practice as document in the U.S. Environmental Protection Agency (EPA) as part of implementation of the Clean Power Plan.[2] ORA/TURN also concur with Staff's classification of specific program types into the three buckets, with a few clarifications proposed below.[3]

A. Programs with Existing Conditions Baseline should be changed to Programs with Control or Comparison Case(s) as the Baseline.

The programs for which Staff considers an existing conditions baseline appropriate include those that use a Normalized Metered Energy Consumption (NMEC) framework and are currently permissible as High Opportunity Programs or Projects (HOPPs) as well programs that use experimental design/randomized control trials (RCTs).[4] These programs use an explicit comparison with past performance in a particular building and/or a set of similar buildings in order to isolate the savings resulting from an efficiency intervention. When the comparison is properly constructed and controlled, these comparison methods are both analytically rigorous and aligned with state policy direction to incorporate more meter-based savings estimation into the EE portfolio.[5]

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[2] U.S. Environmental Protection Agency (EPA), *Evaluation Measurement and Verification (EM&V) Guidance for Demand-Side Energy Efficiency (EE)*. Draft for Public Input, August 3, 2015, p. 11-14.

[3] The White Paper includes a full discussion of the Staff's program level recommendations, p. 17-25.

[4] The HOPPs rubric was created as a part of the Commission's initial Assembly Bill (AB) 802 implementation and authorized by the *Assigned Commissioner and Administrative Law Judge's Ruling Regarding High Opportunity Energy Efficiency Programs or Projects*, issued December 30, 2015.

[5] Senate Bill (SB) 350 directed the Commission to incorporate meter-based savings estimates into EE measurement to the extent feasible, while AB 802 requires the Commission to consider NMEC as a measure of energy savings.

ORA/TURN support the White Paper's conclusion that a code/standard baseline is not directly applicable to NMEC and RCT. However, strictly speaking the baseline for NMEC and RCT is not existing conditions because the efficiency of the existing equipment on the premises is not being systematically documented and compared to the efficiency of program measures in order to determine savings. Rather, the baseline for NMEC and RCT programs is the energy consumption of the control or comparison case(s) that are being compared to post-intervention energy consumption to determine savings. This is true both for RCTs and for NMEC quasi-experimental and pre/post designs.[6] ORA/TURN therefore recommend that this category be renamed "Programs with Control or Comparison Case(s) as the Baseline." This is consistent with national best practice as documented by EPA, which notes that when an efficiency intervention is measured through a well-designed comparison method, "separately determining the [baseline] efficiency of individual pieces of equipment is unnecessary."[7]

Consistent with the above, ORA/TURN recommend that only those behavioral, retrocommissioning, and operational programs (BROs) that use control or comparison case(s) based on consumption data as the baseline be included in this category. This recommendation is consistent with existing Commission guidance on HOPPs regarding BROs as well as Commission guidelines on behavioral comparative energy use programs. The White Paper, however, did not specify whether all BRO programs that used deemed or calculated savings would be included in this baseline treatment. ORA/TURN recommend a simple clarification that only BROs utilizing control or comparison case(s) belong in this category. BROs that utilize deemed or calculated savings should have baselines set on a measure basis.

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[6] RCT and quasi-experimental designs compare the energy consumption of treated units to untreated units, while some NMEC approaches use a pre/post designs to compare the same unit's energy consumption over time.

[7] EPA *EM&V Guidance*, p. 12.

For financing programs, the justification in the White Paper for considering existing conditions the baseline is difficult to follow. The White Paper appears to base the baseline determination on the quantity of ratepayer dollars at stake and the quantity of projects financing may enable.[8] However, these justifications could apply to many programs included in other buckets and are not directly related to determining the counterfactual baseline. ORA/TURN recommend that the Commission set more consistent guidance for financing programs. Financing program designs should be included in the three broad baseline buckets based on the measurement framework and/or measure characteristics of the financing program This means that financing programs that utilize control or comparison case(s) as the baseline should be included with RCT and NMEC designs in the comparison case baseline group, financing programs using deemed or calculated savings should be included with other programs with baselines set measure by measure, and financing programs for new construction/major renovation or for code baseline customer segments should be included with other code baseline programs.

2. Are there additional exceptions to the use of existing conditions baselines that the Commission should adopt? Describe your proposals in detail.

No response at this time.

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[8] White Paper, p. 21.

3. Would it be appropriate to apply the baseline policies included in the Assigned Commissioner's Ruling on high opportunity programs and projects, issued December 30, 2015, rather than make additional new policy in the absence of new information? Why or why not?

A. The Commission's full guidance on baselines for specific deemed and calculated measures should supersede the guidance on deemed and calculated approaches in the HOPPs framework.

The December 30, 2015 *Assigned Commissioner and Administrative Law Judge Ruling Regarding High Opportunity Energy Efficiency Programs or Projects* (HOPPs Ruling) largely focused on creating a framework for programs and projects utilizing NMEC as a measure of energy savings. However, the HOPPs Ruling also allowed limited inclusion of any deemed measures as a part of the HOPPs framework if those measures met a set of criteria around reparability, "stranded" below-code savings, and the existence of pre-approved savings values.[9]

The White Paper proposes a new comprehensive framework for baseline determination for programs utilizing both deemed and calculated measures with baselines set corresponding to the measure type and the situation in which it is being deployed. The specific guidance in the White Paper applies to a broader range of deemed and calculated measures than theHOPPs guidance on deemed measures. It also includes more detail on the framework for deemed and calculated measures, including effective useful life, lifecycle savings estimates, and dual baseline treatment .[10]

The White Paper suggests that the HOPPs framework continue unchanged at this time, but addresses only the NMEC portion of the HOPPs Ruling and not the deemed

[9] HOPPs Ruling, p. 11.

[10] See further the White Paper discussion of programs with baseline determination on a case-by-case basis on p. 24-30, which includes a full discussion of the framework for most deemed and calculated measures.

section. This could lead to considerable confusion concerning what the actual baseline policy is and whether a particular deemed measure or project is included in the White Paper framework or the HOPPs framework. Accordingly, ORA/TURN recommend that the guidance related to baselines fordeemed and calculated measures be superseded by the Commission's full guidance on baselines for specific deemed and calculated measures in the upcoming decision.

B. The Commission should require the use of control or comparison groups for NMEC programs whenever feasible.

As noted above, HOPPs programs and projects use an explicit comparative framework in order to measure the impact of a set of program interventions on energy consumption. Simple NMEC approaches use a pre/post design that compares normalized pre-intervention consumption at a site with normalized post-intervention consumption at the same site. RCTs and quasi-experimental approaches go a step further and layer on the use of a control or comparison group of non-participants on top of the pre/post design in what is known as a difference-in-difference design.

RCTs and quasi-experimental approaches are substantially more rigorous than pre/post designs because they account for changes in exogenous determinants of energy use that are unrelated to the efficiency intervention but can have a substantial impact on consumption. Of particular importance are macroeconomic trends such as recessions and recoveries that increase or decrease energy consumption widely due through changes in production, income effects, etc. Simple pre/post designs have difficulty accounting for these changes and risk over- or under-estimating savings due to factors unrelated to the efficiency intervention and in some cases could show negative savings even though the efficiency intervention is performing well.[11]

[11] This is a particular risk in periods of economic recovery when energy consumption increases substantially as production expands and consumer purchases rebound from recessionary lows. Without the use of a control group, this exogenous increase in energy consumption could swamp efficiency gains

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RCTs and quasi-experimental designs control for exogenous shifts in energy use by factoring out changes in energy consumption in similar buildings, resulting in more accurate estimates of the true impact of efficiency interventions. For this reasons, the Commission should amend the HOPPs framework to require the use of RCTs and quasi-experimental designs utilizing control or comparison groups whenever it is feasible to do so. While some program designs such as comprehensive retrofits in large commercial facilities may not be amenable to constructing robust control or comparison groups, most mass-market (i.e. residential and small commercial) HOPPs programs draw from substantial populations of similarly-situated buildings and customers and control/comparison group designs can be implemented without imposing any undue burden or cost on program administrators and implementers.

4. Are there challenges associated with the practical implementation of the staff proposals included in the attached staff paper? Describe. What recommendations can you make to ensure that any new baseline policy the Commission adopts can be applied consistently in the real world?

No response at this time.

5. What recommendations could or should be implemented to minimize assessment or documentation burdens on implementers, customers, and evaluators?

A. The Commission should form a working group to develop a consensus technical proposal on the evidence required for early retirement and repair eligible projects.

ORA/TURN agree with Staff's recommendation that the Commission should further clarify the evidentiary standard used to determine whether a measure is eligible

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and pre/post NMEC savings estimates may in fact appear to be negative.

for early retirement treatment.[12] Current Commission guidance requires a "preponderance of evidence" standard where PAs must show that it is more likely than not that the early retirement was program induced in order to reduce the risk of crediting early retirement savings for projects that would have happened in the absence of program intervention. The standard the Commission currently uses to determine early retirement eligibility is reasonable.[13] What is needed is for the Commission and Staff to establish clear guidelines for the implementation of the evidentiary standard and a transparent and timely process for how the Commission will determine whether a project is eligible for early retirement treatment.

The White Paper also proposes that repair eligible projects "should include documentation to demonstrate that the individual equipment being replaced *could* otherwise be repaired…and that the cost of repair would have been less than 50% of the replacement cost."[14] Left unclear in the Staff proposal is the evidentiary standard for this showing and what evidence would be required to meet that standard.

Regardless of the ultimate standards the Commission sets for early retirement and repair eligible projects, the operationalization of an evidentiary standard in the energy efficiency context requires technical judgments on what types of evidence are sufficient to meet the burden of proof and who the burden falls upon. In order to facilitate transparent evaluations, the Commission should form a working group to develop a consensus proposal to guide technical determinations on what constitutes a sufficient showing for early retirement and repair eligible for whatever standards the Commission ultimately adopts. The working group should consider what information implementers and PAs would be required to produce to support a claim of early retirement or repair

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[12] White Paper, p.28

[13] EPA's Clean Power Plan guidance actually recommends a higher bar based on "strong evidence" that the early retirement was program induced. See further, EPA *EM&V Guidance*, p. 12.

[14] White Paper, p. 27.

eligible and the process by which the Commission would ultimately determine whether such a claim is supported by the evidence.

ORA/TURN recommend that the upcoming decision order the formation of the working group and set the schedule for its meetings and deliverables. The Commission should then take up the working group's recommendations by scoping this issue into a subsequent phase in this proceeding.

6. Do you agree with or take any exception to the preliminary analysis and assumptions contained in the Navigant technical analysis, on which staff relied in part in preparing their recommendations? Explain.

No response at this time.

7. Are there types of energy efficiency activities for which it remains unclear what baseline is appropriate? Describe.

No response at this time.

8. Are the measures listed in Tables 1-3 of the attached staff white paper appropriately categorized? Are there types of measures missing from any of these lists? For each recommended change, explain your reasoning.

No response at this time.

9. Do you agree with the staff recommendations for how to initially estimate lifecycle impacts for the different categories of baseline treatment until better information is available? Or would you recommend a different approach? Describe your preferred approach to lifecycle impacts and your rationale.

No response at this time.

10. What additional analysis do you believe should be performed in order to inform policy on setting of baselines for energy efficiency programs and/or measures? What analysis specifically might help to inform the potential of occurrences of "stranded" efficiency potential?

No response at this time.

11. How and where should California modify its analysis, planning, and impact estimation across CEC codes and standards development, utility codes and standards advocacy, local government or marketplace codes and standards compliances and enforcement, and ratepayer rebate and incentive programs, to best address potential, strategy, and influence in realizing savings?

A. The Commission should remove the codes and standards savings element of PA efficiency savings goals to eliminate potential double counting issues as PA portfolios transition more fully to programs that do not have a code or standard baseline.

Staff raises the specter of double counting savings that are already occurring in the economy, thanks to California's building codes and appliance standards, by also counting them as meter-verified energy savings flowing from energy efficiency program interventions.[15] Similarly, in D.15-10-028, the Commission recognized that "[d]ouble-counting will be an issue to consider as we reexamine our policies concerning baseline in 2016, including reflecting legislative direction, to allow savings credit for "'to and through code' activities."[16]

Under the Commission's current policies, the potential and goals analysis, and the EE goals derived from that study, account for energy efficiency savings that will be captured through regular equipment turnover because of the minimum requirements of

[15] White Paper, p. 7.

[16] D.15-10-028, p. 35.

codes and standards. Such savings are "credited proportionally to the IOUs for their support of codes and standards advocacy in the CEC's periodic processes for establishing codes and standards."[17] The risk is that some of these same savings will also be credited to the IOUs through an "existing conditions" baseline that does not distinguish between savings likely to occur anyway at the time of burnout or regularly scheduled upgrade, and truly incremental savings resulting from an EE program intervention that might have otherwise been "stranded". While Staff acknowledges "a significant amount of uncertainty in estimates of stranded potential and double counting," Staff warns that "the potential for double counting may be as significant as the stranded and operational potential for additional savings" that AB 802 seeks to capture.[18] As such, Staff suggests that the Commission "may need to take up the issue of whether it is appropriate to continue to support and give credit (in the form of crediting of energy efficiency savings toward their goals) to the IOUs for their codes and standards advocacy work at the CEC."[19]

Given the mandates of AB 802 and SB 350, and the Commission's preliminary interpretations of those statues, we anticipate that the EE portfolios will increasingly look to net-metered energy consumption-based programs to deliver energy savings, rather than programs utilizing the traditional code/standard baselines.[20] This change, presumably imminent, heightens the importance of disentangling codes and standards savings from the savings that will be measured at the meter per AB 802. Double-counting efficiency savings is problematic any way you look at it. It could result in grid reliability impacts,

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[17] White Paper, p. 11.

[18] White Paper, pp. 9, 11.

[19] White Paper, p. 11.

[20] White Paper, p. 17. ORA/TURN support the Staff recommendation of an expanded application of the HOPPs framework beyond 10% of the portfolio.

and associated costs, to the detriment of ratepayers.[21] It also undermines the intent of AB 802 and SB 350 to reduce carbon emissions. As Staff explains:

> Since the intent of SB 350 and AB 802 is to reduce carbon emissions, shifting to existing conditions baseline is ineffective if we simply log savings that were already happening or counting them in both the forecast and the program claims. The challenge to doubling energy efficiency is that there is a significant amount of efficiency savings that is already expected to be achieved through existing programs and the adoption of codes and standards updates, and that the savings from application of those codes and standards to regular equipment replacement have already been built into the demand forecast.[22]

And last but not least, ratepayer funds should not be used to pay for EE that would occur anyway. This double-paying (for double-counted savings) wastes funds, when ratepayer funding should be used to strategically capture stranded savings *in reality*, and thus support a bona fide increase in the efficiency of existing buildings.

ORA/TURN recommend that the Commission act now to mitigate this double counting risk, rather than take up the inquiry suggested by Staff at some point in the future. We submit that most efficient first step is to revise the goal-setting methodology to remove savings assumed to flow from the IOUs' codes and standards advocacy. Doing so is administratively simple, since the Commission has adopted separate goals for codes and standards advocacy and the remainder of the PAs' portfolios.[23] We suggest that the Commission implement this policy change for the 2017 goals. While some HOPPs activities may be implemented this year, thus increasing the risk of double-counting in 2016, we believe it is reasonable to delay adjusting the goals until 2017 because of the lag between the adoption of new baseline policies and the implementation of programs designed around those policies, as a practical matter.

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[21] *See* White Paper, p. 11.

[22] White Paper, p. 6.

[23] *See* D.15-10-028, pp. 35, 37.

At the same time, ORA/TURN do not oppose a continuation of the IOUs' codes and standards advocacy work. Such work "may be one of the most cost-effective ways to tap the savings potential for EE," as the Commission noted in D.05-09-043 and most recently in D.15-10-028.[24] To the extent those efforts are fruitful, the CEC will capture estimated and actual savings that result from higher appliance and building standards in its demand forecast. But under our recommended approach, those savings would not be added to the IOUs' goals, and neither would the IOUs count those savings towards their goals. IOU goals would instead be focused on delivering verified resource savings through their programs, including verified below-code savings.

Double-counting may remain an important concern in the demand forecast. However, in its contribution to the White Paper, the CEC proposes an accounting mechanism to ensure that codes and standards savings from PA program participants are not counted twice. As CEC staff explains:

> The doubling goal would be best served by the utilities estimating with greater accuracy the savings observed in program participant buildings with respect to existing conditions, providing the Energy Commission's demand forecasting staff with that information for incorporation into the forecast. Energy savings for non-participants in utility programs would use the more global approaches that are used to incorporate Standards savings estimate in the forecast. In this way demand forecasting staff would have the full information needed to minimize "double counting."[25]

In essence, the CEC proposes to fully count all PA program participant savings in the demand forecast, including those that are below prevailing code or standard. In order to prevent double-counting, the CEC will include only codes and standards savings estimates for non-participants in the demand forecast. This would be accomplished by subtracting program participant below-code savings from codes and standards impact

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[24] D.15-10-028, pp. 34-35 (quoting D.05-09-043, p. 123).

[25] White Paper, Appendix B, p. 44.

assessments (which currently include both program participants and non-participants) or through developing a new methodology that only counts non-participants.

ORA/TURN applaud the CEC's efforts to more accurately incorporate savings from program participants into the demand forecast. Fully crediting ratepayer-funded efficiency savings ensures that efficiency programs lead directly to procurement offsets and delayed or avoided distribution or transmission infrastructure investments, where feasible, to the benefit of ratepayers. Adjusting codes and standards impacts to include only non-participants is an important step to guaranteeing that only "*actual, realized savings are counted* in the demand forecast."[26]

12. In light of recommended potential changes to baselines, what additional or different analysis would recommend be performed to inform changes to energy efficiency goal setting at the Commission and the CEC in the future?

No response at this time.

13. What are the implications of the staff proposal to revert to setting energy efficiency goals based on net savings rather than gross savings? Do you agree or disagree with this recommendation and why?

A. Staff's proposal to set "net" goals aligns with the overarching objective of AB 802 and SB 350 to increase the capture of incremental efficiency savings.

Staff proposes to set goals as net of free-ridership (after factoring in spillover), so that savings counted towards the goals will only include savings that can be reasonably attributed to ratepayer-funded efficiency programs.[27] The Commission set net EE goals

[26] White Paper, Appendix B, p. 42. Emphasis in the original.

[27] White Paper, p. 31.

prior to the adoption of D.08-07-047, which moved to gross goals. Staff's rationale for reverting to net goals is compelling:

> [A]ccounting for program attribution remains a critical element to effectively implementing AB 802, regardless of whether the savings are achieved through deemed, metered, or calculated engineering approaches. This new definition of energy efficiency makes it even more important – not less so – that the PA's goals be aligned with directing funds toward incremental savings, because the potential for free-ridership and double counting will be much greater with existing conditions baseline.[28]

ORA/TURN agree with Staff that, "Now that simply complying with code can qualify a customer to receive incentives…it is even more critical that goals discourage free ridership."[29]

ORA/TURN support Staff's proposed move to net goals to improve the alignment between the interests of PAs in meeting their goals and the underlying policy objective of maximizing incremental efficiency savings. Staff reports, based on input gathered from PAs, that "net savings impacts on ESPI payments and portfolio cost-effectiveness are not prioritized compared with achieving (gross) portfolio savings goals, which suggests to staff that a clearer signal is needed to encourage Program Administrators to maximize net portfolio impacts."[30] Setting net goals would motivate the PAs to reduce free-ridership through their program design and implementation strategies. As Staff astutely observes:

> Program Administrators have just as much opportunity to reduce free ridership in the course of implementation (compared to the ex ante estimate) as they do to worsen it, as this parameter is primarily dependent on approaches to customer targeting. Programs may target customers by seeking out and soliciting new projects that push the customer to adopt

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28 White Paper, p. 31.

29 White Paper, p. 33.

30 White Paper, p. 33.

energy efficiency measures that they were not already planning on, or they may simply "harvest" projects that have already been planned.[31]

Not only is moving to net goals consistent with the purpose of AB 802 and SB 350 to maximize cost-effective incremental efficiency savings, but it would add consistency within the Commission's own policies and also facilitate better inter-agency coordination around demand forecasting and procurement planning. Staff notes that the Commission's existing policy framework uses net impacts in every area but for the goals, including the Efficiency Saving Performance Incentive (ESPI), the cost-effectiveness calculator, and the Additional Achievable Energy Efficiency forecast.[32] Plus, contrary to the Commission's basis for moving from net to gross goals in D.08-07-047 – to align with the CEC's demand forecasting process – Staff explains that the CEC actually needs net IOU program savings for their forecasts, not gross savings.[33] Returning to net goals will therefore bring the Commission, the CEC, and the IOUs into alignment around a common framework for measuring efficiency savings and determining whether efficiency goals have been met.

For all of these reasons, the Commission should act now, given the recent mandates from Sacramento and the Commission's own energy policies, to motivate the PAs to increase their focus on net savings by setting net goals.

B. Setting annual and cumulative net goals would advance the State's interest in accurately estimating lifecycle impacts of efficiency investments, and in prolonging those impacts.

In addition to setting net goals instead of gross goals, ORA/TURN recommend that the Commission specify that net goals are annual and cumulative, consistent with the

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[31] White Paper, p. 33.

[32] White Paper, p. 32.

[33] White Paper, p. 32.

approach adopted by the Commission in D.04-09-060, which ushered in the modern framework for setting EE goals. In that decision, the Commission adopted annual GWh, MW, and MMTh goals and cumulative GWh and MMTh goals for 2004-2013 (with an intention of updating the goals every three years).[34] The Commission clarified that "annual" goals represented the annual GWh, MW, and MMTh savings "achieved by the set of programs and measures implemented in that specific program year," and "cumulative" goals represented the "annual savings from energy efficiency program efforts up to and including that program year," starting with the first year covered by the new goals, 2004.[35]

Setting net annual and cumulative goals again should motivate the PAs to develop and manage their portfolios so as to prioritize the delivery of first year net savings while also taking heed of the importance of increasing the total amount of efficiency savings over time. Focusing only on annual savings obscures the lifecycle impacts of different efficiency measures, that is the measure impacts over the estimated useful life of the measure. Measures degrade at greatly varied rates, with some performing more like a power plant or long-term Power Purchase Agreement, while others function more akin to a short-term procurement resource. Staff highlights the importance of considering lifecycle impacts because these impacts determine the level of greenhouse gas reductions provided by the portfolio. Lifecycle impacts are also necessary in reliably planning for future grid infrastructure investment decisions and determining cost-effectiveness.[36]

Setting net cumulative goals will help to support all of these objectives. As the Commission explained in D.07-10-032, cumulative goals require the PAs to consider how to maintain the level of savings delivered in past program years over time, "such as

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34 D.04-09-060, p. 37 (updating) and Tables 1A-1E (IOU-specific and Total Goals).

35 D.04-09-060, *Interim Opinion: Energy Savings Goals for PY 2006 and Beyond*, pp. 9-10.

36 White Paper, p. 34.

by repeating the equivalent measure delivery and incentive again, promoting measures with much longer expected lives that will endure over many years ahead and not have to be replaced so soon, and/or achieving market transformation strategies that ensure only like-kind efficiency lamps [for example] can be purchased in 2009."[37]

14. How should the potential baseline policy changes affect the CEC's analysis of additional achievable energy efficiency included in the biennial demand forecast? Explain in detail.

No response at this time.

15. To what extent and how should the staff recommendations on changes to baselines affect the way financial incentives are paid to consumers for energy efficiency projects? Explain in detail.

No response at this time.

16. What mechanisms, if any, should be considered to manage annual budgets for incentive and other program expenses once a greater range of efficiency actions and impacts can participate and be compensated within programs?

No response at this time.

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[37] D.07-10-032, *Interim Opinion on Issues Relating to Future Savings Goals*, pp. 80-81.

17. Should there be a distinction between the manner in which savings are credited to consumers installing energy efficiency projects and the manner in which program administrators are credited with savings to be counted against their goals? How and why or why not? Explain in detail.

Current Commission policy is that PAs have considerable latitude to set customer incentives, subject to certain limits.[38] Calculated incentives are generally tied to modeled energy savings, while deemed customer incentives may or may not be directly linked to savings. ORA/TURN consider current Commission guidance on this issue reasonable. Incentive designs should be tailored to the customer segment for maximum effectiveness and the Commission should permit a variety of incentive designs, including those that may have no monetary incentive. However, for regulatory counting purposes all savings counted towards goals, shareholder incentives, etc. should be net.

18. Assuming the Commission adopts a new baseline policy in 2016, how long should this policy remain in place? What additional activities should inform future changes?

No response at this time.

19. How should the updating of baseline policy be coordinated with other Commission and CEC activities or future analyses of potential and goals (including adoption of codes and standards for existing buildings, preparation of a demand forecast and the component known as "additional achievable energy efficiency," and setting goals for "doubling" of energy efficiency, as called for in Senate Bill 350)?

No response at this time.

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[38] The most general limit is that incentives may not exceed 50% of incremental measure cost, though even this requirement can be waived at staff discretion.

20. How can the Commission best continue to encourage programs to pursue savings above minimum code requirements once AB 802 is fully implemented?

No response at this time.

III. CONCLUSION

For the foregoing reasons, ORA/TURN respectfully submit that the Commission should adopt the recommendations contained herein.

Respectfully submitted,

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